

Fig. 1

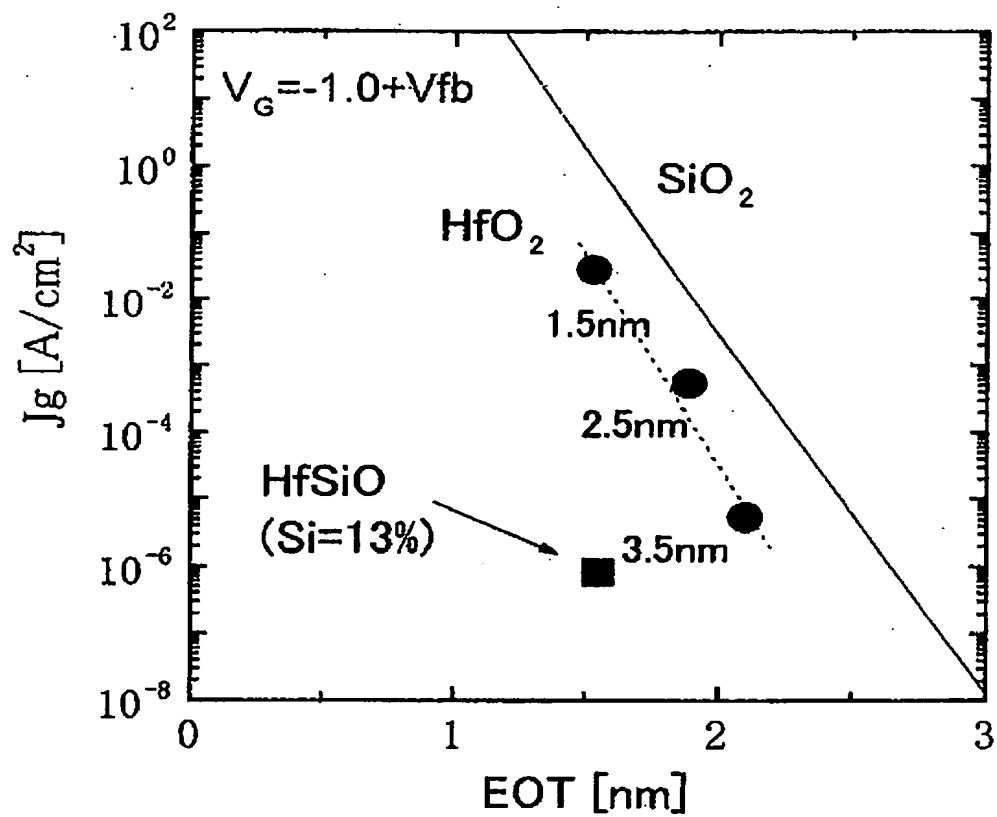


Fig. 2

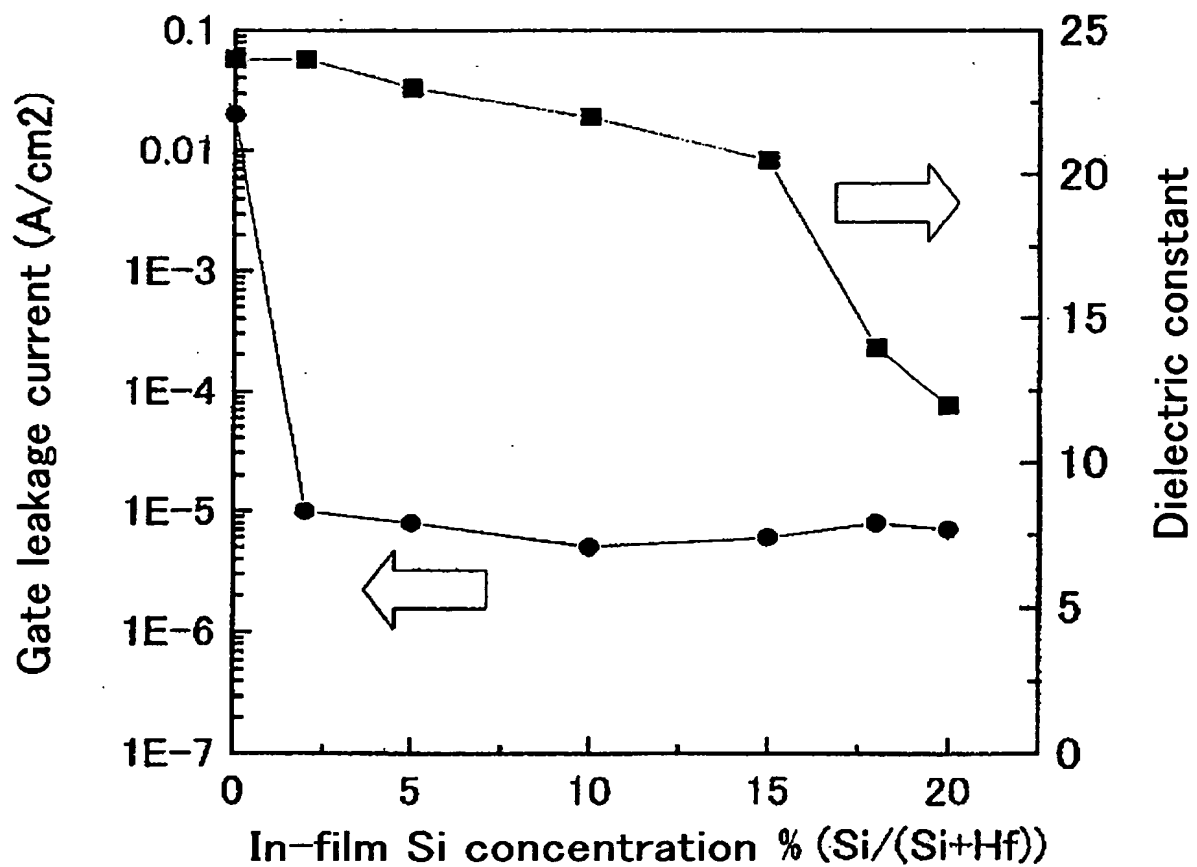


Fig. 3

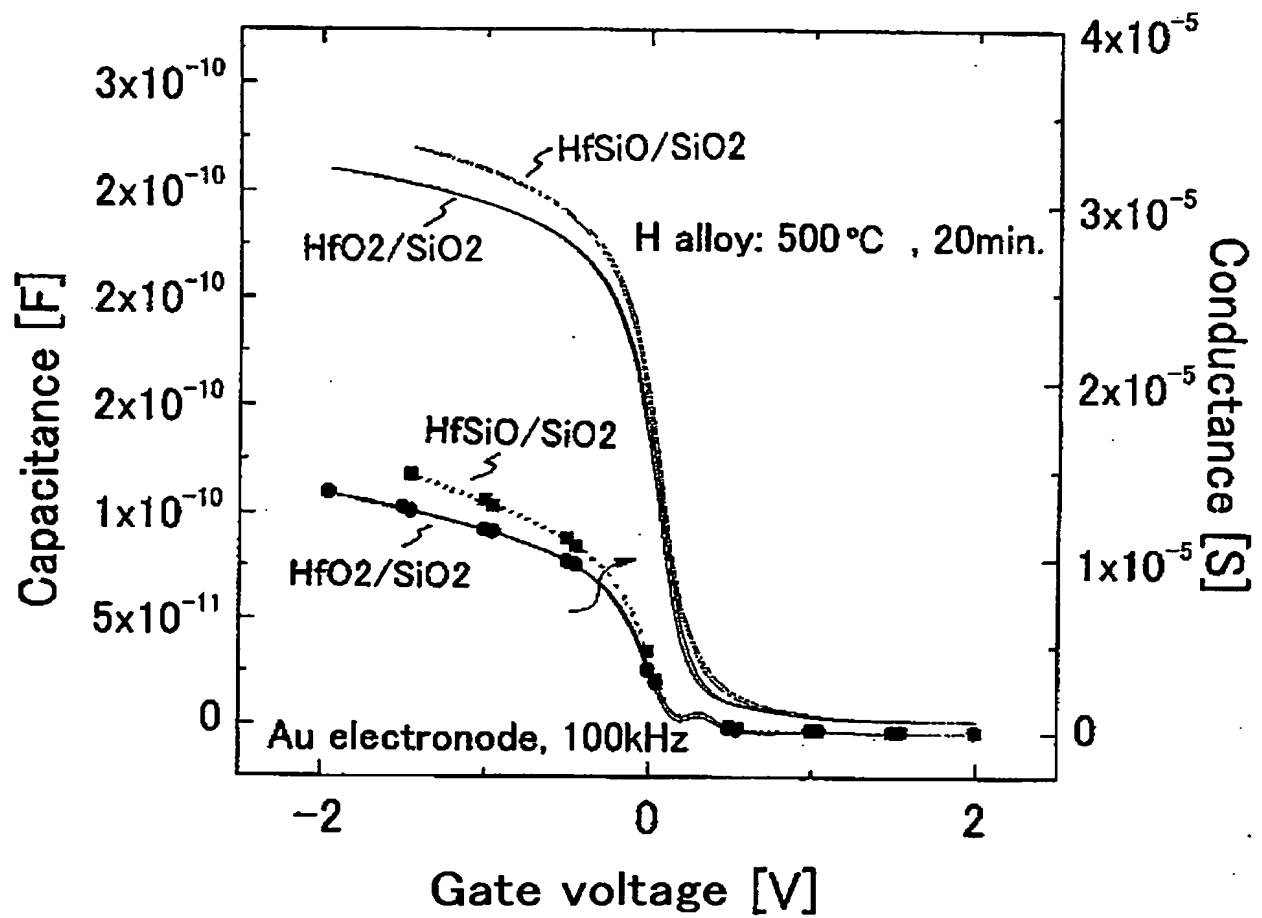


Fig. 4

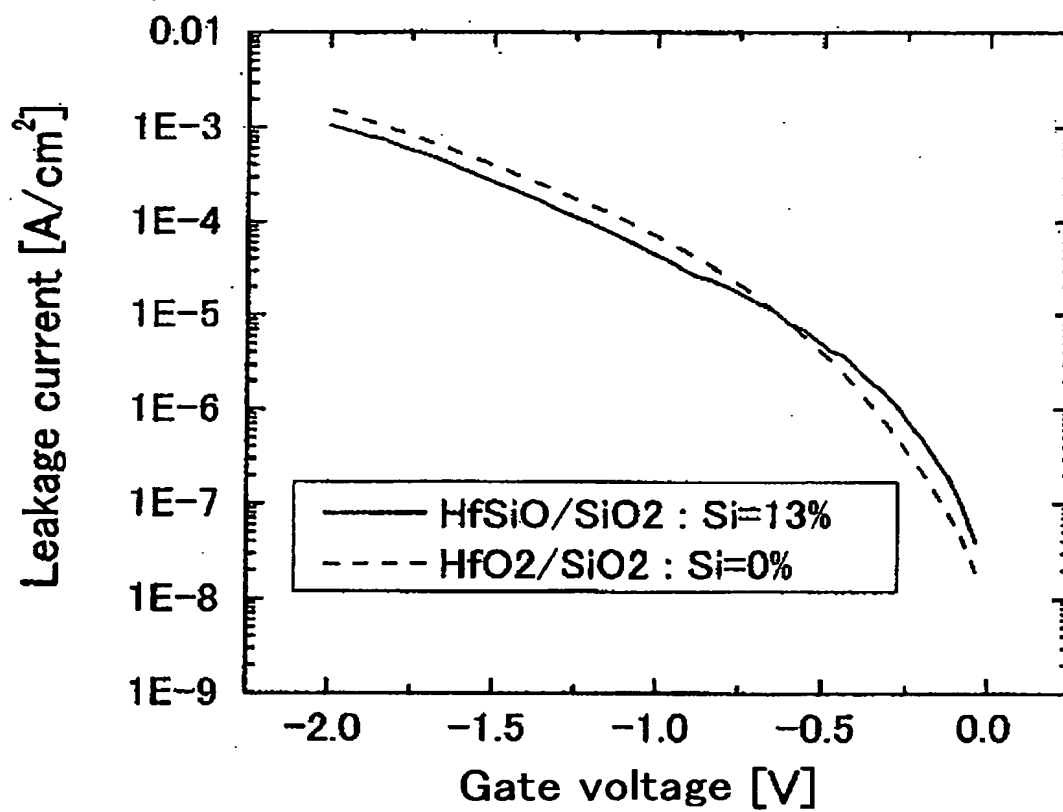


Fig. 5

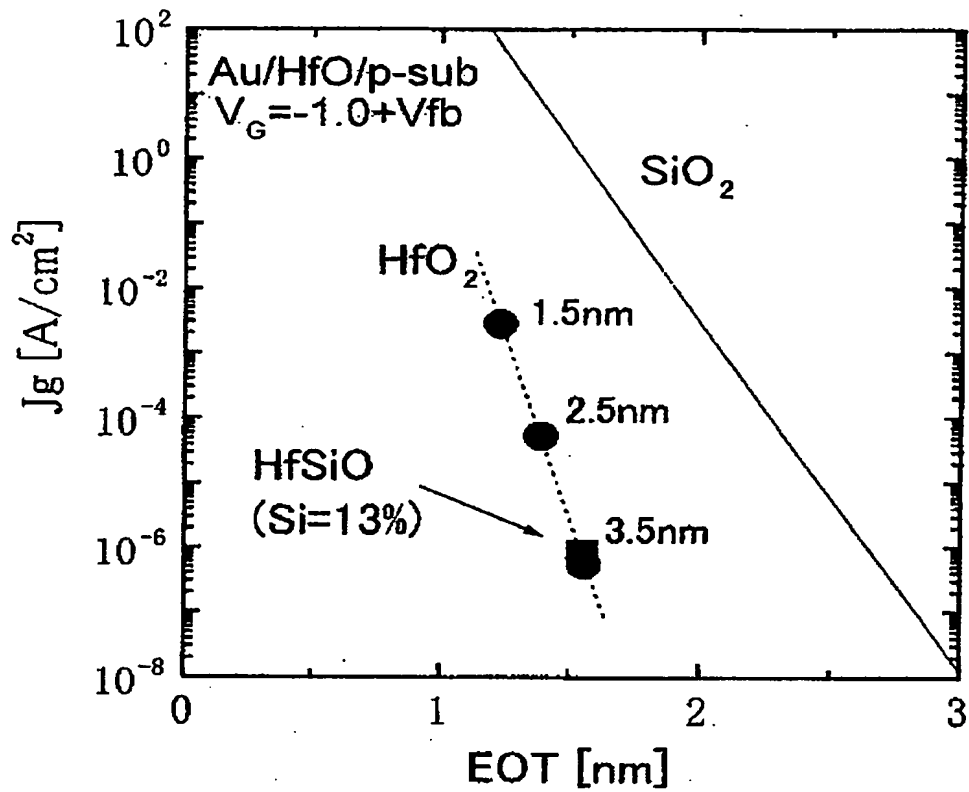
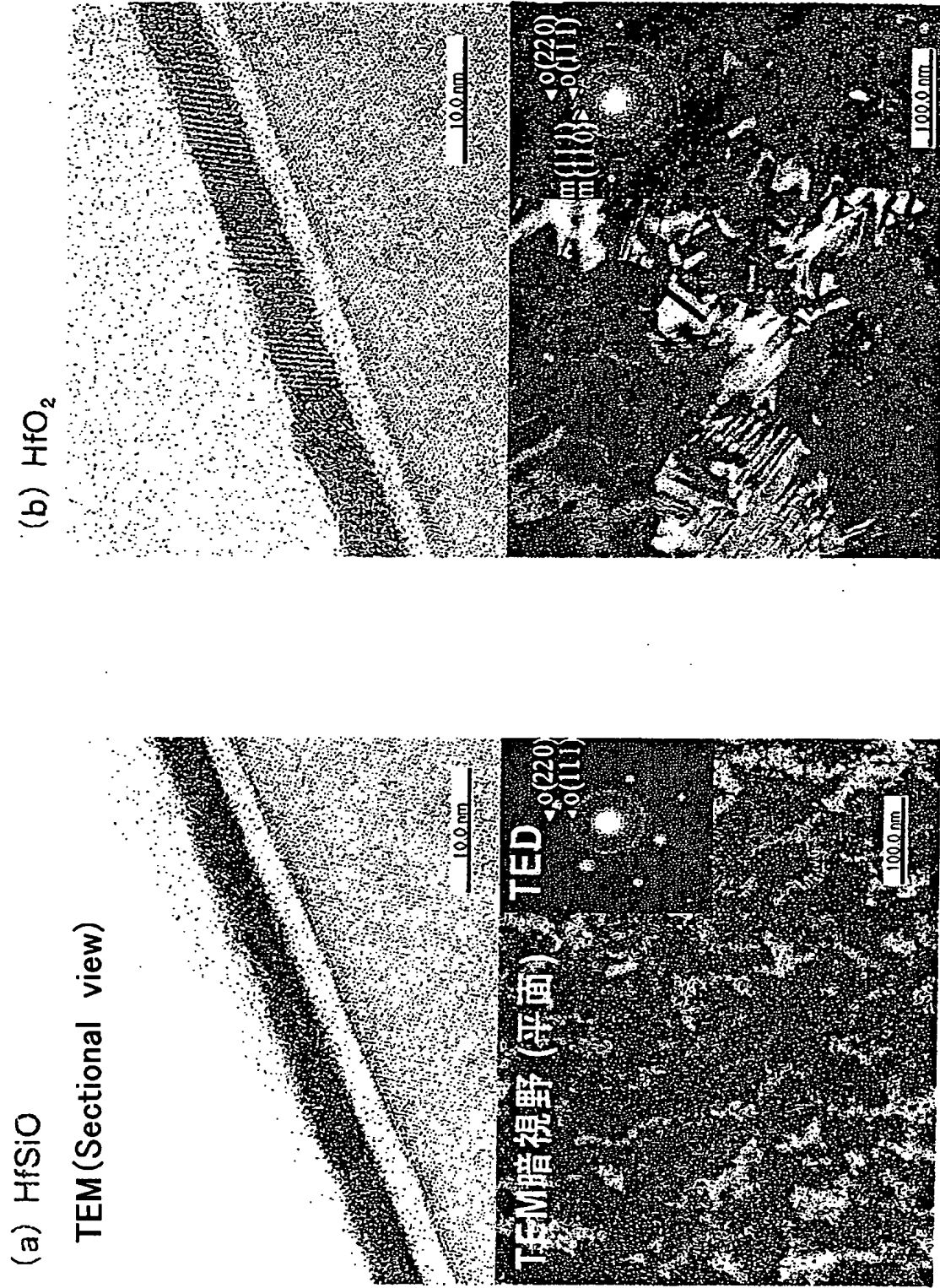
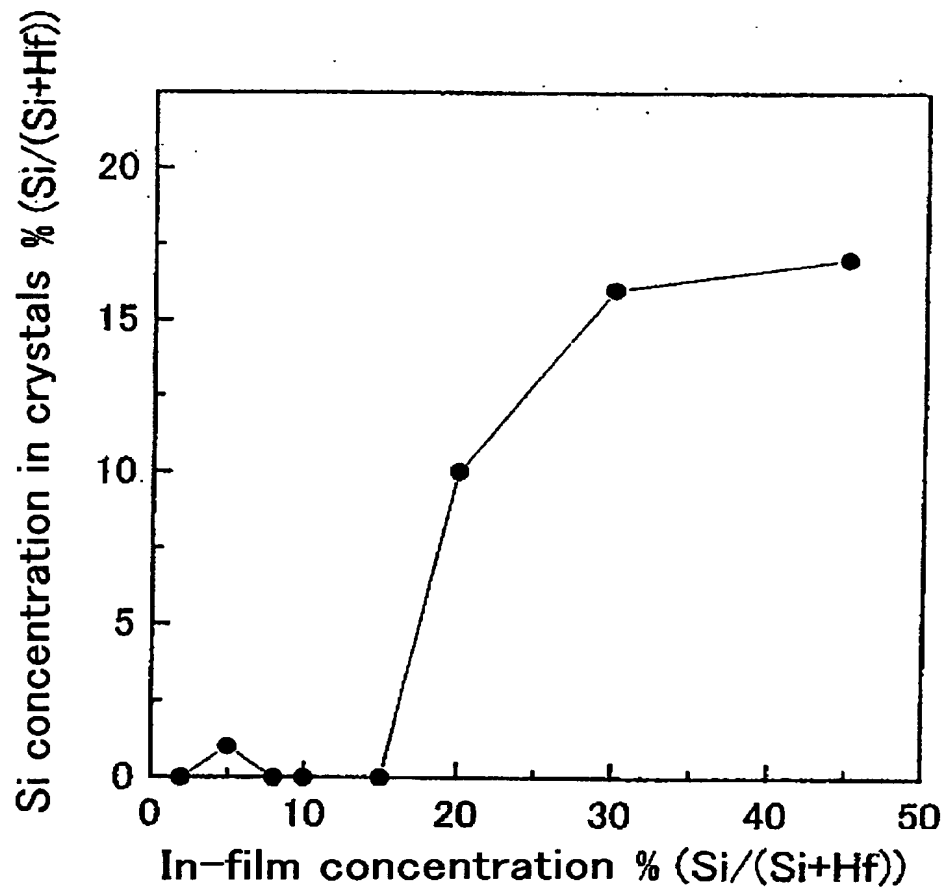


Fig. 6



TEM Dark Field (Top plan view)

Fig. 7





(b)

$$\odot$$

(b)

Fig. 9

Form oxide film Form HfSiO film Oxidation by oxygen Anneal after deposition
for sintering the film

Si原料
Hf原料
H₂O



(a)



-(b)-



(c)



(d)

Fig. 10

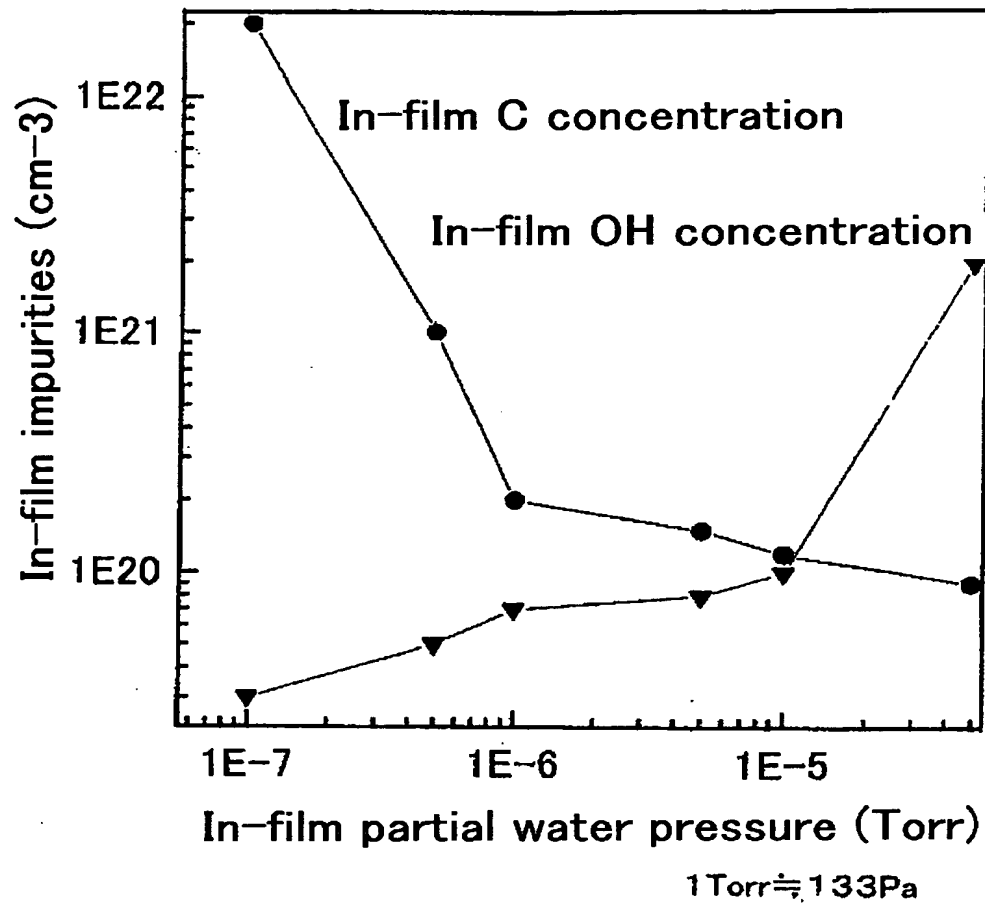


Fig. 11

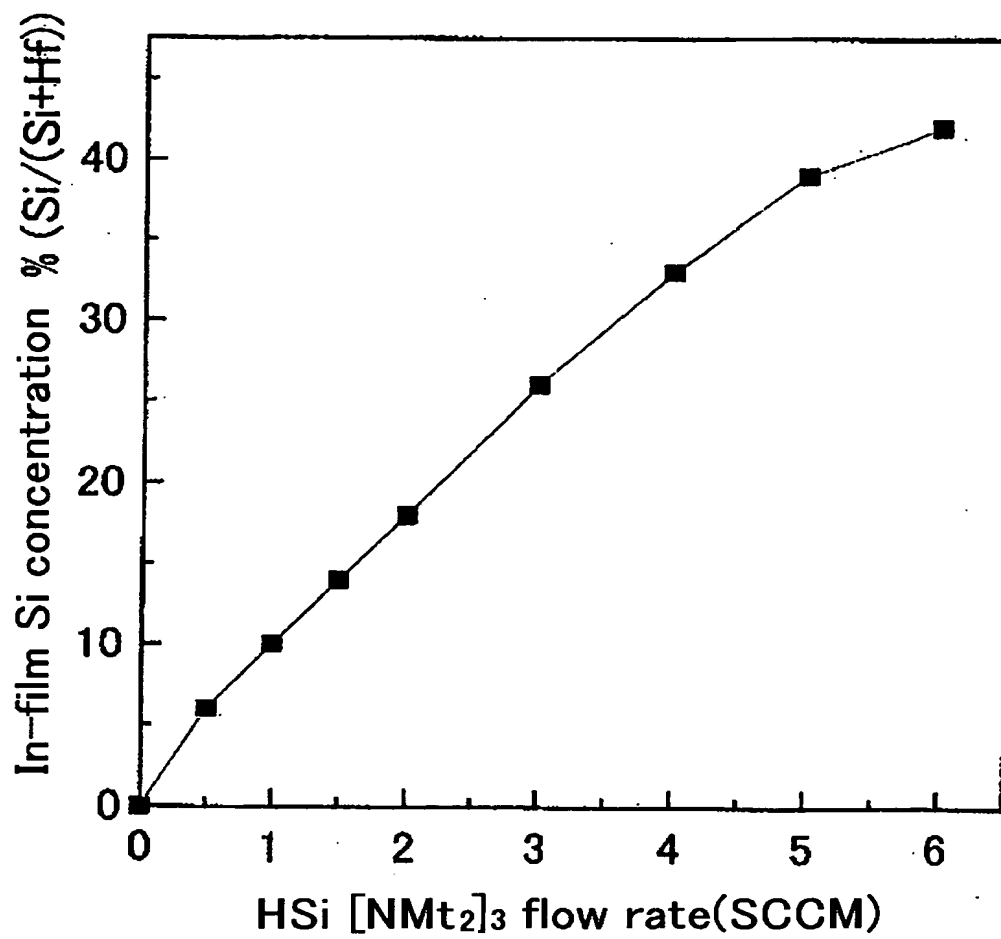


Fig. 12

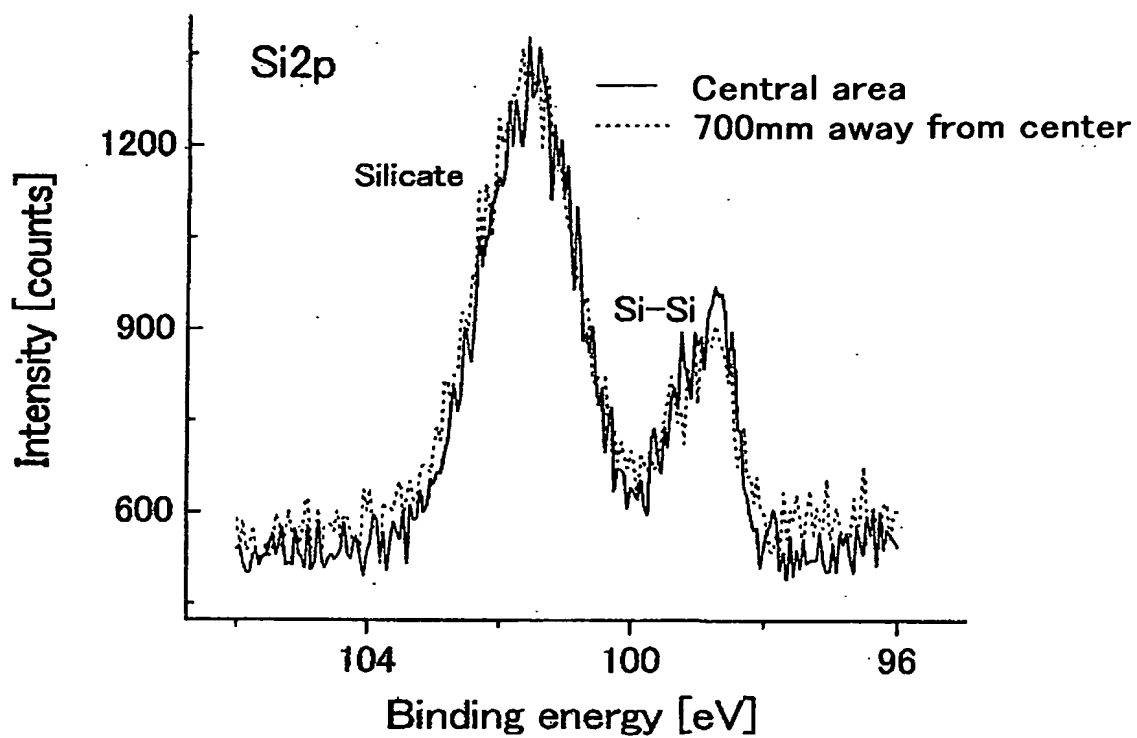


Fig. 13

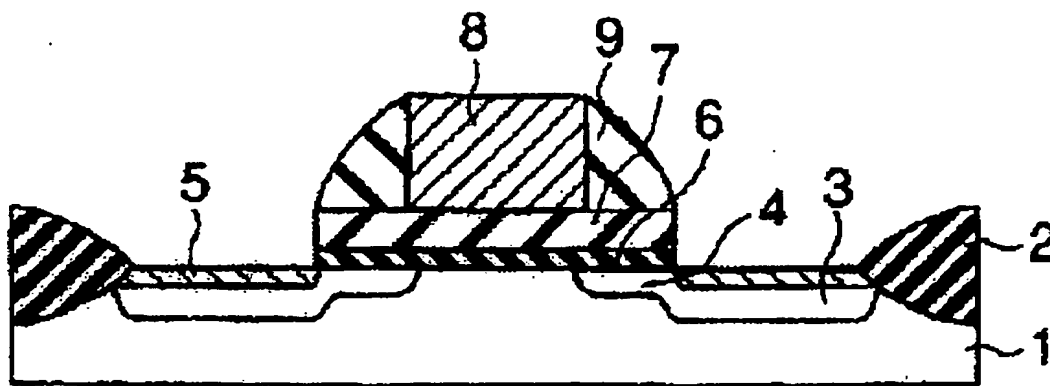


Fig. 14

